

A MOTOR OF ROTOR WITH BUILT-IN PERMANENT MAGNET

ABSTRACT

5 The present invention is a motor of rotor with built-in permanent
magnet, which comprises an annular stator and a rotor. The annular stator is
set a cylindrical capacity with suitable diameter; the rotor is set in the
cylindrical capacity, and an air gap is between a circumference surface of
cylindrical capacity and rotor. Rotor further includes a rotor core, and a
plurality of openings are formed surrounding the rotor core. Each opening is
10 with two parallel surfaces, a top surface and a bottom surface, and each of
them is a flat plate figure. The top surface is adjacent to a contour of rotor
core, and extends along the circumference contour forming a side surface
which substantially parallel to the contour. A suitable distance is between
the side surface and circumference contour, and any two adjacent surfaces
15 are with a channel of suitable width. A plurality of permanent magnets are
arranged in openings by way of interlaced magnetic poles, and the shape of
permanent magnet is matched with the shape of the opening.